

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P. Dex 1450 Alexandria, Viginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

07/15/2003

Ginger R. Dreger, Esq. HELLER EHRMAN WHITE & MCAULIFFE, LLP 275 Middlefield Road Menlo Park, CA 94025 EXAMINER

MARVICH, MARIA

ART UNIT

CLASS-SUBCLASS

1636

514-044000

DATE MAILED: 07/15/2003

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839.752	04/19/2001	Victor J. Dzau	50025/003002	2781

TITLE OF INVENTION: THERAPEUTIC USE OF CIS-ELEMENT DECOYS IN VIVO

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$650	\$300	\$950	10/15/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

(703)746-4000 Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

7590

07/15/2003

Ginger R. Dreger, Esq. HELLER EHRMAN WHITE & MCAULIFFE, LLP 275 Middlefield Road Menlo Park, CA 94025

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

	additionable to all our ro, on the date marter or on
(Depositor's name)	
(Signature)	
(Date)	

APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	09/839 752	04/19/2001	Victor I Dzau	50025/003002	2781	

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APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE .
nonprovisional	YES	\$650	\$300	\$950	10/15/2003
EXAM MARVICH		ART UNIT 1636	CLASS-SUBCLASS 514-044000		
CFR 1.363). Change of correspond Address form PTO/SB/I Tree Address" indicates	dence address or indication of dence address (or Change (22) attached. tion (or "Fee Address" Ind or more recent) attached.	of Correspondence	2. For printing on the patent fr the names of up to 3 registered or agents OR, alternatively, (2 single firm (having as a mem attorney or agent) and the na registered patent attorneys or ag is listed, no name will be printed	patent attorneys) the name of a aber a registered mes of up to 2 gents. If no name	
PLEASE NOTE: Unless	an assignee is identified to the USPTO or is being	g submitted under separate	l appear on the patent. Inclusion	of assignee data is only appropri NOT a substitute for filing an ass R COUNTRY)	ate when an assignment has
Please check the appropriated		egories (will not be printed 4b. Payr	on the patent) individual	1	group entity
☐ Issue Fee ☐ A che			eck in the amount of the fee(s) is entered by credit card. Form PTO-200		

(Authorized Signature) (Date)

☐ Advance Order - # of Copies

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____(enclose an extra copy of this form).



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. SOX 1459 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/839,752 04/19/2001		Victor J. Dzau	50025/003002 2781		
7590 07/15/2003			EXAMINER		
Ginger R. Dreger		IFFF IIP	MARVICH, MARIA		
	HELLER EHRMAN WHITE & MCAULIFFE, LLP 275 Middlefield Road			PAPER NUMBER	
Menlo Park, CA 9	4025		1636		
•			DATE MAILED: 07/15/2003		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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Ginger R. Dreger, Esq. HELLER EHRMAN WHITE & MCAULIFFE, LLP			MARVICH, MARIA			
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Menlo Park, CA 94 JNITED STATES	025		1636			
MITED STATES		·	DATE MAILED: 07/15/2003			

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.		Applicant(s)			
	09/839,752		DZAU ET AL.			
Notice of Allowability	Examiner		Art Unit			
	Maria B Marvich, F	hD	1636			
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLO or other appropriate IGHTS. This applica	OSED in this app communication	olication. If not includ will be mailed in due	ed course. THIS		
 4. ☐ Acknowledgment is made of a claim for foreign priority und a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority doc 	This communication is responsive to <u>5/28/03</u> . The allowed claim(s) is/are <u>13-16</u> . The drawings filed on <u>12 October 2001</u> are accepted by the Examiner. Comparison of the drawings made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 5. Acknowledgment is made of a claim for domestic priority ur (a) The translation of the foreign language provisional a 6. Acknowledgment is made of a claim for domestic priority ur Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the	pplication has been nder 35 U.S.C. §§ 12 this communication	received. 20 and/or 121. to file a reply co	mplying with the requ	irements noted EXTENDABLE.		
7. A SUBSTITUTE OATH OR DECLARATION must be submiNFORMAL PATENT APPLICATION (PTO-152) which gives reas				NOTICE OF		
8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No. (b) including changes required by the proposed drawing of the including changes required by the attached Examiner's light lig	correction filed	_, which has be iment or in the C	en approved by the E	No		
9. ☐ DEPOSIT OF and/or INFORMATION about the deposattached Examiner's comment regarding REQUIREMENT FOR TI				Note the		
Attachment(s)						
 1⊠ Notice of References Cited (PTO-892) 3□ Notice of Draftperson's Patent Drawing Review (PTO-948) 5□ Information Disclosure Statements (PTO-1449), Paper No	4 <u> </u>	nterview Summa xaminer's Amer xaminer's State	I Patent Application (in the control of the control	No		

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ALLOWANCE

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the present invention advances the prior art by design of a method for inhibiting proliferative lesion formation such as restenosis or neointima formation through the introduction of double stranded E2F decoy. The method of the invention is most similar to the invention of Dzau (US 5,821,234), which describes a method for inhibiting proliferative lesion formation through the introduction of antisense sequences to inhibit cyclins and cyclin kinases. The difference between the two is that the prior art teaches that inhibition of PCNA (proliferating cell nuclear antigen and cdc2 kinase ultimately inhibit the ability of E2F to activate transcription while the method of the instant application uses DNA molecules that function to directly inhibit E2F function. Therefore, according to the instant invention, the inhibition of proliferative lesion formation is enhanced by direct binding of E2F decoy to free E2f transcription factor in the cell.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Application/Control Number: 09/839,752

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Page 3

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria B Marvich, PhD whose telephone number is (703) 605-1207. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, PhD can be reached on (703) 305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 305-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Maria B Marvich, PhD Examiner Art Unit 1636

July 11, 2003

TERRY MCKELVEY

antiel